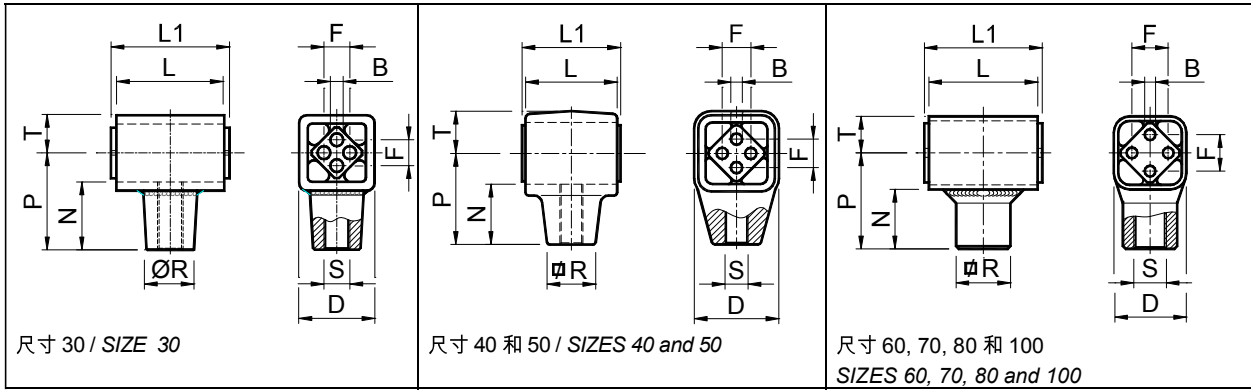


VIB 弹性组件 型号: TB / Elastic Components VIB Type: TB

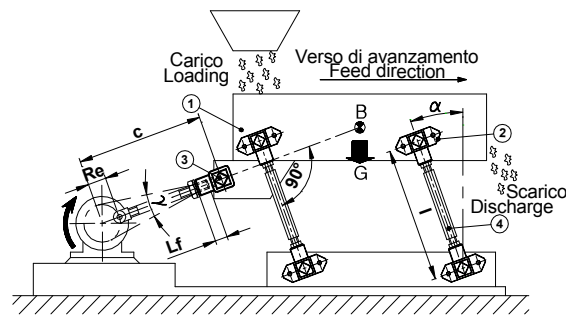


型号 Type	编号 N°	Fa max	*γ max	n	B	D	F	L	L1	N	P	R	S	T	重量 Weight in kg
TB 30	RE020768	375	10°	1150	6 ^{+0.5} _{+0.0}	35	12 ±0.3	50	55	31.5	45	22	M12	17.5	0,30
TB 30 S	RE020770	375	10°	1150	6 ^{+0.5} _{+0.0}	35	12 ±0.3	50	55	31.5	45	22	M12 S	17.5	0,30
TB 40	RE020772	945	10°	1150	8 ^{+0.5} _{+0.0}	54	20 ±0.4	60	65	40.5	60	28	M16	27	0,60
TB 40 S	RE020774	945	10°	1150	8 ^{+0.5} _{+0.0}	54	20 ±0.4	60	65	40.5	60	28	M16 S	27	0,60
TB 50	RE020776	1930	10°	760	10 ^{+0.5} _{+0.0}	74	25 ±0.4	80	90	53	80	42	M20	37	1,40
TB 50 S	RE020778	1930	10°	760	10 ^{+0.5} _{+0.0}	74	25 ±0.4	80	90	53	80	42	M20 S	37	1,40
TB 60	RE020780	3350	10°	760	12 ^{+0.5} _{+0.0}	76	35 ±0.5	100	110	62	100	45	M24	38	2,30
TB 60 S	RE020782	3350	10°	760	12 ^{+0.5} _{+0.0}	76	35 ±0.5	100	110	62	100	45	M24 S	38	2,30
TB 70	RE020784	5720	10°	560	M12x40	80	40 ±0.5	120	130	65	105	60	M36	40	7,00
TB 70 S	RE020786	5720	10°	560	M12x40	80	40 ±0.5	120	130	65	105	60	M36 S	40	7,00
TB 80	RE020788	11350	6°	330	M16x22	110	45	200	210	75	130	80	M42	55	20,00
TB 80 S	RE020790	11350	6°	330	M16x22	110	45	200	210	75	130	80	M42 S	55	20,00
TB 100	RE020796	23000	6°	90	M20x28	136	60	300	310	92	160	100	M52	68	38,00

Fa: 最大加速力 以 N 表示 / Max acceleration force in N

*γ: 振动角度 ° / Oscillating angle in °

n: 偏心轮最高旋转速度 以 min⁻¹ 表示 最大角度为*10° 从位置 0 波动*±5°
Max crank rotation velocity in min⁻¹ at the max angle *10° from 0 *±5°.



图例说明 / Key:

1: 滑槽 / Sliding chute

2: VIB BT-F 型悬架 / BT-F suspension

3: VIB TB 型连杆头 / TB Drive head

4: 连接单位 / Connecting rod

B: 重心 / Center of gravity

c: 曲柄轴距 / Distance between centers (rod)

G: 重量 / Total weight

I: 轴距 / Distance between centers

L: 螺纹段最低长度 (1.5-2 S) / Min Screwed-in length (1.5-2 S)

Re: 曲柄半径 / Crank radius

α: 安装角度从 20° 至 30° / Rocker angle from 20° to 30°

β: 工作角度 / Working angle

材料

尺寸为 20、30、60、70、80 和 100, 外壳为钢制; 尺寸为 40 和 50, 外壳为铝制。尺寸从 20 到 70, 内部方管为铝拉丝, 尺寸为 80 和 100, 内部方管为钢制。

处理

外壳为烤炉涂漆, 内部方管为 RAL 涂漆覆盖。

应用

VIB TB 型振动组件主要应用于“连杆头”连接铰链中。与传统球形连接点相比, 其弹性使得输送具更大的渐进性。

材料


The external body is made of steel in the sizes 20, 30, 60, 70, 80 and 100, light metal die cast in the sizes 40 and 50. The inner square is made of alloy profiles from size 20 to 70, steel in the sizes 80 and 100.

TREATMENTS

The external body is oven-painted while the inner square is covered with a RAL varnish.

DUTY

TB oscillating component is generally used as an elastic hinge in the joint of the big end of the connecting rod. Compared to a traditional ball joint, VIB type TB transfers the movement with a more gradualness.

 **计算实例:** 连杆头 TB 的选择

 **CALCULATION EXAMPLE:** Drive head TB selection

起始数据 / Given data:

n:	旋转速度: Rotation velocity:	150 min ⁻¹	G:	总重量: Total weight:	5800 N
R_e:	曲柄半径: Crank radius:	18 mm	c:	连杆轴距: Distance between centers (rod):	250 mm

未知数据 / Unknow data:

尺寸选择 / Size selection

计算步骤 / Calculation steps:

比例 R_e/c : $= \frac{18}{250} = 0.072 < 0.1$ 0.1= 在此值下可获得谐波激励
 Ratio R_e/c : $= \frac{18}{250} = 0.072 < 0.1$ 0.1= value under that it is possible to achieve an harmonic excitation

$$\gamma: 2 \cdot \arcsin\left(\frac{R_e}{c}\right) = 2 \cdot \arcsin\left(\frac{18}{250}\right) = 8.28^\circ$$

V_p: 表面速度 $= \frac{R_e \cdot \pi \cdot n}{30} = \frac{18 \cdot \pi \cdot 150}{30} = 282.6 \text{ mm/s}$
 Periferic velocity

F_a: 加速力: $= \frac{V_p^2 \cdot G}{R_e \cdot 9810} = \frac{282.6^2 \cdot 5800}{18 \cdot 9810} = 2485.13 \text{ N}$
 Acceleration force:

结论: 应使用一个 **TB 60** 组件

Conclusion: It must be used one element **TB 60**

